

Work Order ID 138640

November 05, 2015 1:05:13 PM

138640

To Ship Nov 9 or
sooner

Page 1

Item ID: 647.3702 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: 412 Cable Cutter System, High
 Start Date: 11/5/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 11/9/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: SU Date: 11/5/2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.3700	NC3	<u>SU</u>							
100	DOCUMENT CONTROL	0.00							
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 647.3702								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

MCS 15-11-04

BAS
27
9-89

NOV 09 2015

NOV 06 2015

DAS
6
9-89

DAS
28
9-89

BAS
27
9-89

NOV 09 2015

NOV 09 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

Work Order ID 138640

November 05, 2015 1:05:13 PM

138640

Page 2

Item ID: 647.3702

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/9/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00

130

Packaging

Packaging

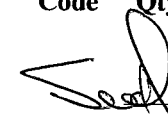
Memo

0.00

Packaging

Identify and pack for shipping as per PPP 647.3702

Location: _____


NOV 9 2015DAS
8
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

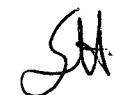
QC

Memo

0.00

Quality Control

ML3 NOV 09 2015

 2015-11-09

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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November 05, 2015 1:05:18 PM

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015**Start Qty: 1.00**

Required Qty: 1.00

Comments:

IPP REV:A 12.10.26 NEW ISSUE DD VERF:JLM
REV:B 15.01.26 as per ecr 14-214 DD VERF:JLM
PER REV NC3 15.03.18 JLM VERIFIED BY:DD

IPP
IPP REV:C AS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
601.3082		Purchased	No				Each	39.0000		6			
601 3082									**			DAS 6 9-89	DAS 28 9-89
RIVET													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK099				39					
				m129702				39					
CR3212-4-1													
647.3903		Manufactured	No				Each	0.0000		1			
647 3903									**			138 33/	DAS 28 9-89
Deflector Assembly													
647.3801		Manufactured	No			110	Each	11.0000	1	1			
647 3801									**				
412 Upper Cutter Assy													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>		DAS 6 9-89	DAS 28 9-89
				CCK028				11					
				121047				2					
				124725				2					
				124726				2					
				124728				3					
				m129702				2					
647.3804		Manufactured	No			110	Each	2.0000	1	1			
647 3804									**				DAS 28 9-89
Lower Cutter Assy High												DAS 6 9-89	NOV 06 2015
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck27				2					
				132976				2					

Picklist Print

November 05, 2015 1:05:18 PM

Page 2

Work Order ID: 138640

138640

Parent Item: 647.3702

647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

647.4410

Manufactured No

110

Each

24.0000

1

1

DAS
6
9-89

DAS
28
9-89

647 4410

Rail

**

Location

Loc Qty

Loc Code

CCK081

24

120755

8

120986

16

647.4010

Manufactured No

110

Each

28.0000

1

1

647 4010

Wiper Deflector RH

**

Location

Loc Qty

Loc Code

cck87

28

120628

3

120740

17

m129721

8

647.4011

Manufactured No

110

Each

27.0000

1

1

647 4011

Wiper Deflector LH

**

Location

Loc Qty

Loc Code

cck78

27

120629

3

120741

17

m129721

7

647.4110

Manufactured No

110

Each

24.0000

1

1

647 4110

Doubler

**

Location

Loc Qty

Loc Code

CCK080

24

120742

6

120987

18

DAS
27
9-89

DAS
6
9-89

DAS
28
9-89
NOV 06 2015

November 05, 2015 1:05:18 PM

Shop Packet Print

Page 2

Picklist Print

November 05, 2015 1:05:18 PM

Page 3

Work Order ID: 138640

138640

Parent Item: 647.3702

647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

647.4111 Manufactured No

110 Each 25.0000 1 1

647 4111

Doubler

**

DAS

28

9-89

Location

Loc Qty

Loc Code

cck111

25

DAS

6

9-89

120743

16

120967

9

647.4112

Manufactured No

110 Each 11.0000 1 1

647 4112

Clip

**

DAS

28

9-89

Location

Loc Qty

Loc Code

CCK112

11

DAS

6

9-89

126770

11

647.4113

Manufactured No

110 Each 11.0000 1 1

647 4113

Clip

**

DAS

28

9-89

Location

Loc Qty

Loc Code

CCK112

11

DAS

6

9-89

126771

11

647.4114

Manufactured No

110 Each 55.0000 2 2

647 4114

Shim

**

NOV 06 2015

Location

Loc Qty

Loc Code

CCK112

55

DAS

6

9-89

120635

14

120746

28

120941

13

DAS

28

9-89

Picklist Print

November 05, 2015 1:05:18 PM

Page 4

Work Order ID: 138640

138640

Parent Item: 647.3702

647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

647.4115

Manufactured No

110

Each

40.0000

2

2

647 4115

Shim

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK112

40

120747

31

120949

9

647.4116

Manufactured No

110

Each

26.0000

1

1

647 4116

Shim

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK112

26

120748

10

121064

16

647.4210

Manufactured No

110

Each

22.0000

1

1

647 4210

Bracket LH

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK112

7

120749

7

CCK123

15

121086

15

647.4211

Manufactured No

110

Each

24.0000

1

1

647 4211

Bracket RH

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK112

9

120750

9

CCK123

15

121134

15

November 05, 2015 1:05:18 PM

Shop Packet Print

Page 4

NOV 06 2015

Picklist Print

November 05, 2015 1:05:18 PM

Page 5

Work Order ID: 138640

138640

Parent Item: 647.3702

647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

647.4311

Manufactured No

110

Each

9.0000

1

1

647 4311

RH Lower Strut

DAS
6
9-89

NOV 8, 2015
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK67

9

126398

9

647.4310

Manufactured No

110

Each

28.0000

1

1

647 4310

LH Lower Strut

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck066

28

126395

19

126396

9

647.4312

Manufactured No

110

Each

9.0000

1

1

647 4312

LH Upper Strut

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK67

9

126399

9

647.4313

Manufactured No

110

Each

9.0000

1

1

647 4313

RH Upper Strut

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck068

9

126401

9

Picklist Print

November 05, 2015 1:05:18 PM

Page 6

Work Order ID: 138640

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

110

Each

1,906.000

34

34

DAS

6

DAS

9-89

28

9-89

NAS1149FN832P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

142

125268

142

ST260a

500

M133316

500

ST267

343

125268

100

M133284

243

st268

921

M130388

921

NAS1149F0332P

Purchased

No

110

Each

1,145.000

157

157

DAS

6

DAS

28

9-89

9-89

NAS1149F0332P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

132

122063

132

ST260a

636

m128401

6

m131026

80

m131697

50

m133284

500

st268

117

123900

7

m130388

86

m133077

24

ST288

260

m133134

260

157

NOV 06 2015

Picklist Print

November 05, 2015 1:05:19 PM

Page 7

Work Order ID: 138640

138640

Parent Item: 647.3702

647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-07

Purchased

No

110

Each

437.0000

12

12

MS27039-1-07

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

334

125654

334

ST286

103

m127813

95

m130388

8

12

DAS
27
9-89

MS27039-1-10

Purchased

No

110

Each

299.0000

42

42

MS27039-1-10

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

CA

41

m128635

41

GA

50

m129541

50

ST280

200

m132677

200

ST285

8

m123522

2

m132640

6

42

DAS
27
9-89

MS27039-08-08

Purchased

No

110

Each

123.0000

16

16

MS27039-08-08

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

CA

8

m130113

8

ST282

115

m129541

20

m130799

95

13799 X12

4

DAS
27
9-89

November 05, 2015 1:05:19 PM

Shop Packet Print

Page 7

Picklist Print

November 05, 2015 1:05:19 PM

Page 8

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647 3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-09

Purchased

No

110

Each

201.0000

14

14

MS27039-1-09

Screw

DAS

6

9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

34

18057

34

GA

36

124859

36

ST0285

91

125646

91

ST285

40

124859

29

m130388

11

MS27039-08-11

Purchased

No

110

Each

198.0000

2

2

MS27039-08-11

SCREW

DAS

6

9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck007a

100

m133363

100

ST282

98

m130358

1

m133134

97

MS24694-S49

Purchased

No

110

Each

231.0000

1

1

MS24694-S49

Screw

DAS

28

9-89

DAS

6

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST289

231

m129499

100

m129702

131

NOV 06 2015

Picklist Print

November 05, 2015 1:05:19 PM

Page 9

Work Order ID: 138640

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

MS24694-C53

Purchased

No

110

Each

160.0000

8

8

MS24694-C53

Screw

DAS 28 6
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST287

160

m129499

8

m129702

152

601.3073

Purchased

No

110

Each

4.0000

1

1

601 3073

Connector

DAS 28 6
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK099

4

M133344

4

AN3-4A

Purchased

No

110

Each

134.0000

3

3

AN3-4A

Bolt

DAS 28 6
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST350

134

m129682

30

m133064

4

m133234

100

AN3-11A

Purchased

No

110

Each

124.0000

8

8

AN3-11A

Bolt

DAS 28 6
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST338a

50

m133363

50

ST349

74

m132823

8

m133234

66

NOV 06 2015

November 05, 2015 1:05:19 PM

Shop Packet Print

Page 9

Picklist Print

November 05, 2015 1:05:19 PM

Page 10

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Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

AN3C10A

Purchased

No

110

Each

15.0000

2

2

AN3C10A

Bolt

BAS
27
9-89

Location

Loc Qty

Loc Code

ST349

15

m128634

15

CR3212-4-2

Purchased

No

110

Each

100.0000

6

6

CR3212-4-2

Cherry Rivet

BAS
27
9-89

Location

Loc Qty

Loc Code

ST320

9

121090

9

ST321

91

m133363

91

CR3212-4-3

Purchased

No

110

Each

0.0000

17

17

CR3212-4-3

Cherry Rivet

BAS
27

CR3212-4-4

CR3212-4-4

Purchased

No

110

Each

0.0000

4

4

CR3212-4-4

CHERRY RIVET

BAS
27

CCR264SS3-04

9-89

Purchased

No

110

Each

699.0000

12

12

CCR264SS3-04

Rivet

BAS
27
9-89

Location

Loc Qty

Loc Code

CCK004

590

123785

400

m129702

190

ST321

109

123352

109

DAS
28
9-89

DAS
28
9-89

DAS
28
9-89

DAS
28
9-89

DAS
28
9-89

NOV 06 2015

Picklist Print

November 05, 2015 1:05:19 PM

Page 11

Work Order ID: 138640

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

CCR264SS-3-03

Purchased

No

110

Each

147.0000

16

16

CCR264SS-3-03

Rivet

DAS 28
6 9-89

Location

Loc Qty

Loc Code

LG001

123

m128606

123

ST321

24

m128606

24

16

CR3213-4-2

Purchased

No

110

Each

557.0000

13

13

CR3213-4-2

Cherry Rivet

DAS 28
6 9-89

Location

Loc Qty

Loc Code

CCK003

192

123301

192

ST319

365

m131340

365

13

CR3213-4-3

Purchased

No

110

Each

417.0000

32

32

CR3213-4-3

Rivet, Cherry

DAS 28
6 9-89

Location

Loc Qty

Loc Code

CCK004

217

123301

45

m129541

100

m130388

72

ST318

200

m131340

200

32

DAS 27
9-89

NOV 06 2015

Picklist Print

November 05, 2015 1:05:19 PM

Page 12

Work Order ID: 138640

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640
647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-4

Purchased

No

110

Each

352.0000

19

19

CR3213-4-4

Rivet, Cherry

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

CCK004

304

126282

304

ST319

48

M130388

48

19

CR3213-4-5

Purchased

No

110

Each

264.0000

42

42

CR3213-4-5

Rivet

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

CCK003

259

M129913

259

CCK004

5

M130388

5

123301

CR3213-4-8

Purchased

No

110

Each

144.0000

4

4

CR3213-4-8

Rivet

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

ST319

144

123785

144

MS21042-3

MS21042L3

Purchased

No

110

Each

182.0000

79

79

MS21042-3

Nut / use MS21042L3

**

DAS

28

DAS

6

9-89

NOV 16 2015

Location

Loc Qty

Loc Code

ST304

182

M129682

182

79

DAS

27

9-89

November 05, 2015 1:05:19 PM

Shop Packet Print

Page 12

Picklist Print

November 05, 2015 1:05:19 PM

Page 13

Work Order ID: 138640

Parent Item: 647.3702

Parent Item Name: 412 Cable Cutter System, High

138640

647 3702

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042-08

MS21042L08

Purchased

No

110

Each

33.0000

18

18

MS21042-08

USE MS21042L08

**

DAS

6
9-89

NOV 06 2015

DAS

28
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

MS21047L06

Purchased

No

110

Each

68.0000

6

6

MS21047L06

Nut Plate

**

DAS

6
9-89

DAS

28
9-89

Location

Loc Qty

Loc Code

ST303

68

m131340

68

MS21047L08

Purchased

No

110

Each

39.0000

6

6

MS21047L08

Nut Plate

**

DAS

6
9-89

DAS

28
9-89

Location

Loc Qty

Loc Code

ST301

39

m129702

39

MS21047-3

Purchased

No

110

Each

133.0000

4

4

MS21047-3

Nut Plate

**

DAS

6
9-89

DAS

28
9-89

Location

Loc Qty

Loc Code

CCK007

50

m133234

50

ST301

75

m133031

50

m133134

25

ST303

8

m130388

8

DAS
27
9-89

4

November 05, 2015 1:05:19 PM

Shop Packet Print

Page 13

Picklist Print

November 05, 2015 1:05:19 PM

Page 14

Work Order ID: 138640

138640

Parent Item: 647.3702

647.3702

Parent Item Name: 412 Cable Cutter System, High

Start Date: 11/5/2015

Required Date: 11/9/2015

Start Qty: 1.00

Required Qty: 1.00

MS21071L3

Purchased

No

110

Each

241.0000

4

4

MS21071L3

ANCHOR NUT

DAS

28

9-89

Location

Loc Qty

Loc Code

ST299

140

124291

36

m129702

104

ST301

101

114348

1

125654

100

BAS
27
9-89

DAS
6
9-89

601.3083

Manufactured

No

110

Each

7.0000

1

1

601.3083

Adhesive Rubber Seal

DAS

28

9-89

Location

Loc Qty

Loc Code

cck012

7

130723

7

BAS
27
9-89

DAS
6
9-89

601.1012

600.1012

Purchased

No

110

Each

0.0000

1

1

601.1012

Sealant (One 6 oz)

DAS

28

9-89

601.2045

Purchased

No

110

Each

8.0000

1

1

601.2045

RTV (LOCTITE 598)McMaster p/n: 6641A41

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK096

8

m133275

8

5/31/2017

BAS
27
9-89

DAS
6
9-89

NOV 06 2015

DAS

28

9-89



04881

SHEET 1 OF 1

DWG NO. 647.3700

REV: N/C

PREPARED BY J. BECKER

DATE: 02/26/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF

NEXT ORDER

TRANSACTION CODES (TC):

A-ADD
R-REVISE

C-CREATE
D-DELETE

REASON: DELETED F/N 57, REVISED F/N 6.

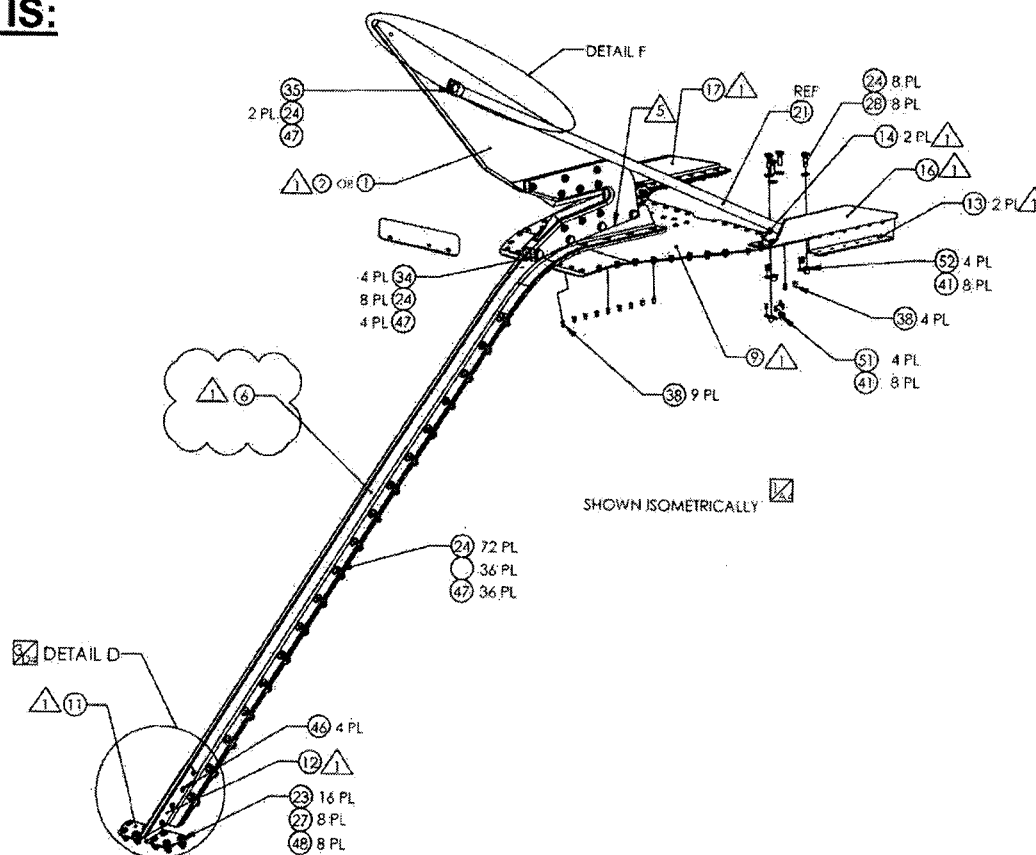
ECR:

N/A

ACTION ITEM:

11.

SHEET 1, ZONE C5 IS:



57	D	647.3916	1	1	1	1	DEFLECTOR UPPER HALF		SA 158690	
6	R	647.3903	1	1	1	1	DEFLECTOR ASSEMBLY			
F/N	NTC	PART NUMBER	3704	3703	3702	3701	DESCRIPTION		MATERIAL	SPECIFICATION
			QTY							
DOCUMENTS EFFECTED:							CHANGE CATEGORY		DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM							☐ MAJOR ☒ MINOR		☐ YES ☒ NO	



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

04845

SHEET 1 OF 1

DWG NO. 647.3700

REV: N/C

PREPARED BY J. BECKER

DATE: 02/11/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

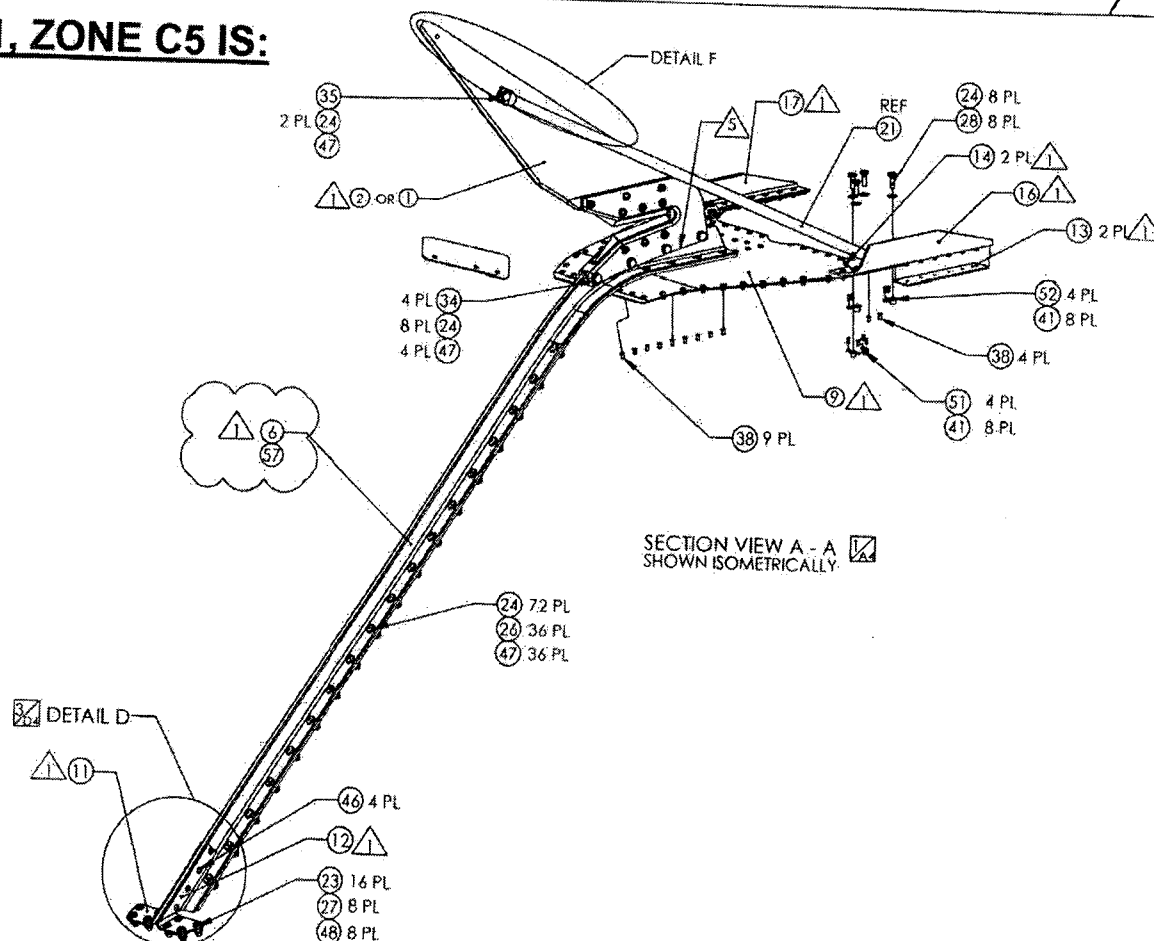
REASON: ADDED F/N 57

ECR:

ACTION ITEM:

1.

SHEET 1, ZONE C5 IS:



57	A	647.3916	1	1	1	1	DEFLECTOR UPPER HALF					
F/N	TC	PART NUMBER	3704	3703	3702	3701	DESCRIPTION				MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:			QTY									

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 02728

SHEET 1 OF 1

DWG NO. 647.3700

REV: NC

PREPARED
BY

R. ROSANO

DATE: 12/23/09

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR

KMFB

QC

FFF

~~1~~ NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED MODEL 214 TO APPROPRIATE DESCRIPTIONS

SHEET 1, ZONE D7 IS:

IS

						647.3704	204, 205, 212, 214 CABLE CUTTERS KIT HIGH		
						647.3703	204, 205, 212, 214 CABLE CUTTERS KIT LOW		
						647.3702	412 CABLE CUTTERS KIT HIGH		
						647.3701	412 CABLE CUTTERS KIT LOW		
						PART #	DESCRIPTION	MAT'L	SPEC.

F/N	TC	PART NUMBER	2901
			QTY

PTY

DESCRIPTION

MATERIAL

SPECIFICATION

DOCUMENTS EFFECTED:

☒ MDL ☒ INSTALL INSTRU ☒ ICA ☒ BOM

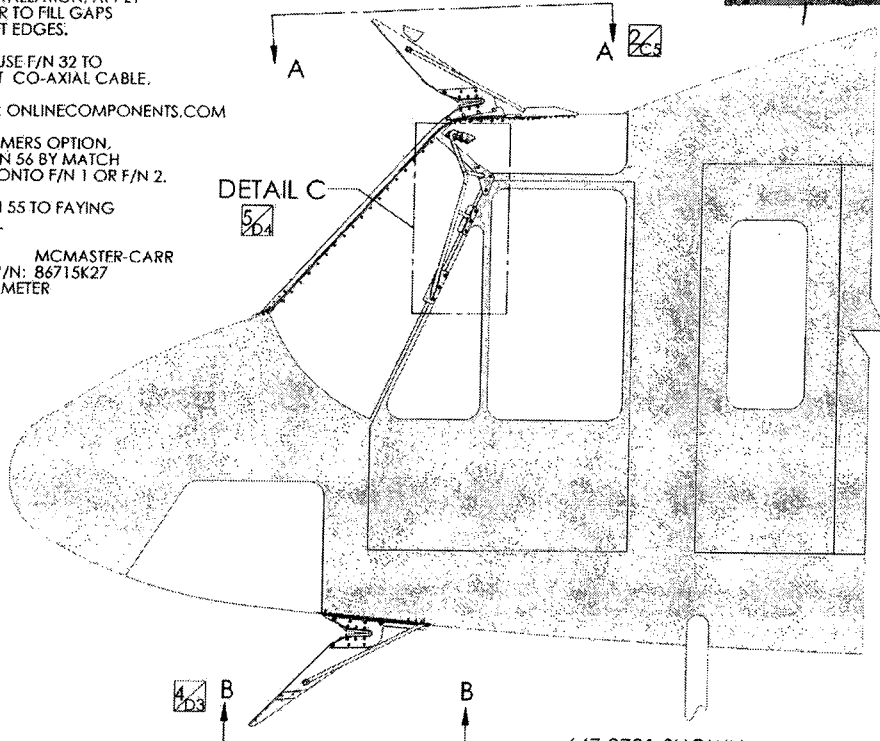
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☒ YES ☐ NO

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NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
- 2 IF REQD, USE F/N 32 TO CONNECT CO-AXIAL CABLE.
- 3 VENDOR : ONLINECOMPONENTS.COM
- 4 AT CUSTOMERS OPTION, INSTALL F/N 56 BY MATCH DRILLING ONTO F/N 1 OR F/N 2.
- 5 APPLY F/N 55 TO FAYING SURFACES.
- 6 VENDOR : MCMMASTER-CARR
VENDOR P/N: 86715K27
60A DUROMETER



UNINCORPORATED ECN(S)

02728, 04845, 04881

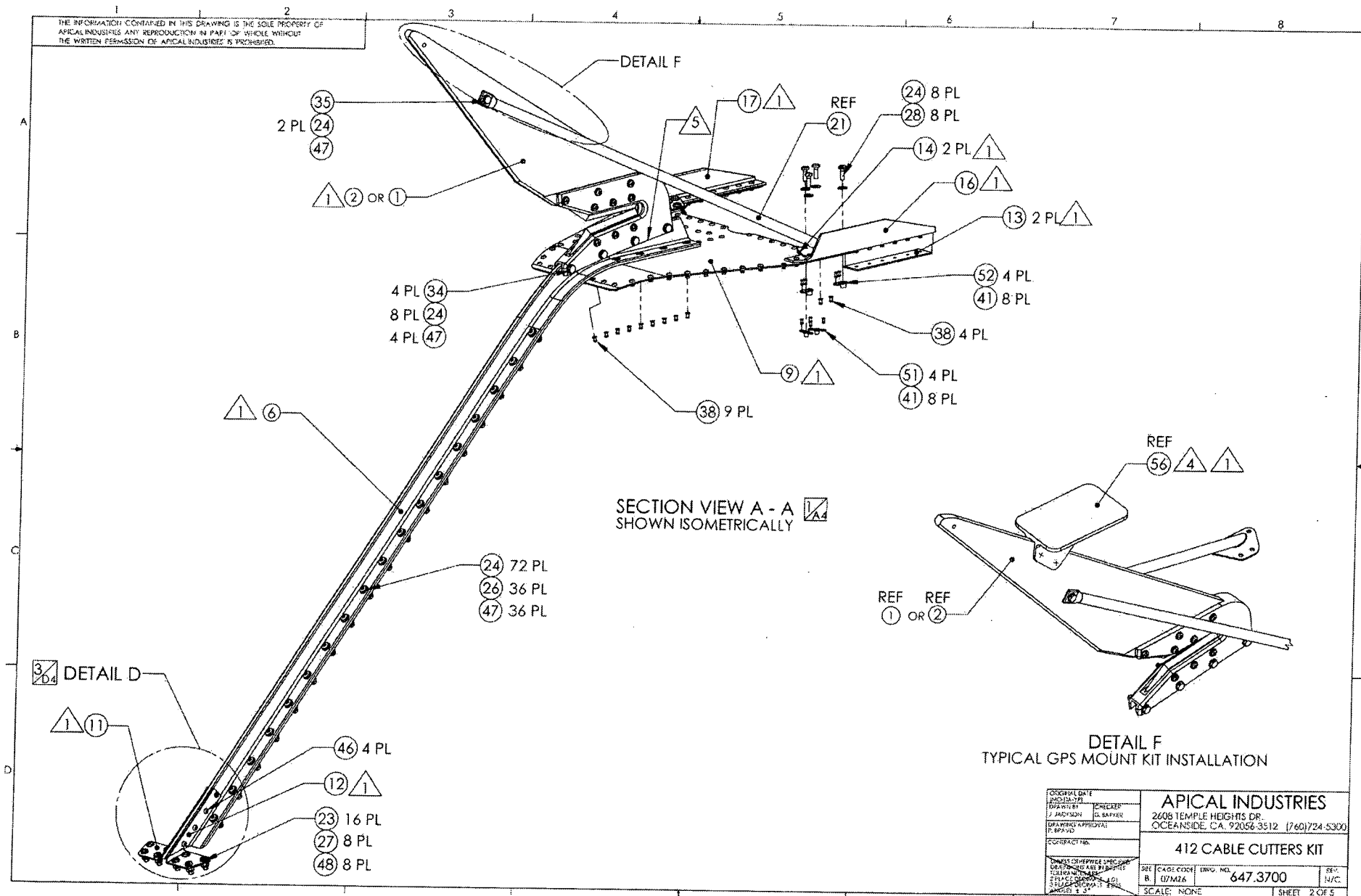
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PRODUCTION REVISION PER		N/C
2	INITIAL RELEASE	09-20-07	F. BRAVO

16	16	16	16	41	601.2207	NUTPLATE RIVET	CCR26455-3-03
12	12	12	12	40	601.2491	NUTPLATE RIVET	CCP26455-3-04
7	7	4	4	39	601.1066	CHERRY RIVET	CR3212-4-4
17	17	17	17	38	601.1065	CHERRY RIVET	CR3212-4-3
5	5	6	6	37	601.1604	CHERRY RIVET	CR3212-4-2
6	6	6	6	36	601.3082	CHERRY RIVET	CR3212-4-1
2	2	2	2	35	601.1874	BOLT	AN3C10A
8	8	8	8	34	601.2826	BOLT	AN3-11A
3	3	3	3	33	601.2823	BOLT	AN3-4A
1	1	1	1	32	601.3073	CONNECTOR	D82-4403
8	8	8	8	31	601.2419	SCREW	MS2469AC53
1	1	1	1	30	601.3070	SCREW	MS2469A-549
2	2	2	2	29	601.2893	SCREW	MS27039-0811
14	14	14	14	28	601.3069	SCREW	MS27039-1-09
16	16	16	16	27	601.2263	SCREW	MS27039-0806
42	42	42	42	26	601.1365	SCREW	MS27039-1-10
12	12	12	12	25	601.2198	SCREW	MS27039-1-07
157	157	157	157	24	601.1607	WASHER	NAS1149F33379
34	34	34	34	23	601.2764	WASHER	NAS1149F33350
1	1	1	1	22	647.4313	RH UPPER STRUT	
1	1	1	1	21	647.4312	LH UPPER STRUT	
1	1	1	1	20	647.4310	LH LOWER STRUT	
1	1	1	1	19	647.4311	RH LOWER STRUT	
1	1	1	1	18	647.4212	PLATE	
1	1	1	1	17	647.4211	BRACKET RH	
1	1	1	1	16	647.4210	BRACKET LH	
1	1	1	1	15	647.4116	SHIM	
2	2	2	2	14	647.4115	SHIM	
2	2	2	2	13	647.4114	SHIM	
1	1	1	1	12	647.4113	CLIP	
1	1	1	1	11	647.4112	CLIP	
1	1	1	1	10	647.4111	DOUBLER	
1	1	1	1	9	647.4110	DOUBLER	
1	1	1	1	8	647.4011	WIPER DEFLECTOR LH	
1	1	1	1	7	647.4010	WIPER DEFLECTOR RH	
1	1	1	1	6	647.3915	DEFLECTOR	
1	1	1	1	5	647.4410	RAIL	
1	1	1	1	4	647.3804	LOWER CUTTER ASSY HIGH	
1	1	1	1	3	647.3803	LOWER CUTTER ASSY LOW	
1	1	1	1	2	647.3802	212 UPPER CUTTER ASSY	
1	1	1	1	1	647.3801	412 UPPER CUTTER ASSY	
					647.3704	204, 205, 212 CABLE CUTTERS KIT HIGH	
					647.3703	204, 205, 212 CABLE CUTTERS KIT LOW	
					647.3702	412 CABLE CUTTERS KIT HIGH	
					647.3701	412 CABLE CUTTERS KIT LOW	

	REF	REF	REF	REF	56	647.5701	GPS MOUNT KIT		
	A/R	A/R	A/R	A/R	55	601.2045	RTV	LOCITE 998	
	A/R	A/R	A/R	A/R	54	601.1012	SEALANT	TPP1-250	
	1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	MIL-R-3665	
	4	4	4	4	52	601.2957	NUTPLATE	MS2107113	
	4	4	4	4	51	600.0795	NUTPLATE	MS210473	
	6	6	6	6	50	601.3066	NUTPLATE	MS21047106	
	6	6	6	6	49	601.3065	NUTPLATE	MS21047106	
	18	18	18	18	48	601.2973	LOCKNUT	MS21047308	
	79	79	79	79	47	601.2943	LOCKNUT	MS210423	
	4	4	4	4	46	601.2364	CHERRY RIVET	CR3213-4-8	
	28	28	42	42	45	601.1183	CHERRY RIVET	CR3213-4-5	
	16	16	19	19	44	601.1915	CHERRY RIVET	CR3213-4-4	
	24	24	32	32	43	601.0790	CHERRY RIVET	CR3213-4-3	
	31	31	13	13	42	601.1039	CHERRY RIVET	CR3213-4-2	
	3704	3703	3702	3701	FINO	PART #	DESCRIPTION	MATL	SPEC.

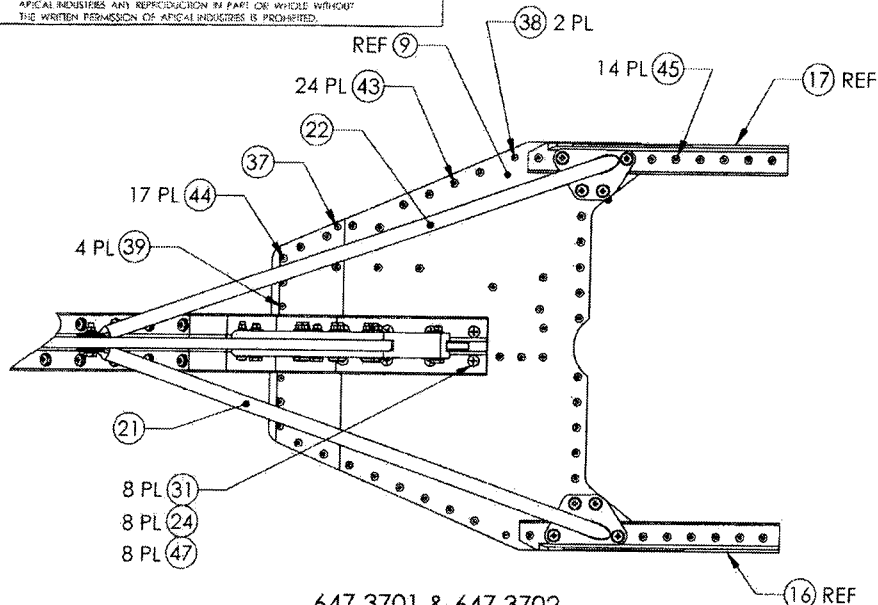
QTY.		NEXT ASSY (S)		ORIGINAL DATE		PARTS LIST	
				09-20-07		APICAL INDUSTRIES	
				DRAWN BY: J. JACKSON		2608 TEMPLE HEIGHTS DR.	
				CHECKED: D. HARRIS		OCEANSIDE, CA 92056-3512 (760)724-5300	
				DRAWING APPROVAL: J. JACKSON		412 CABLE CUTTERS KIT	
				DATE: 09-20-07		REV. N/C	
				FOR THE CUSTOMER:		SCALE: NONE	
				UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		SHEET 1 OF 5	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

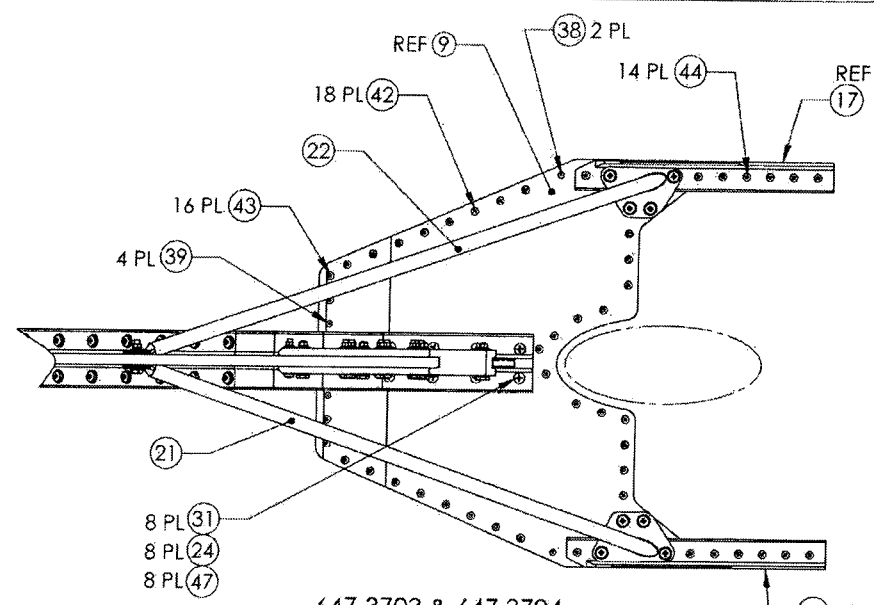


ORIGINAL DATE 2/12/2011		APICAL INDUSTRIES	
DESIGNED BY J. JACKSON		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. PAVO		412 CABLE CUTTERS KIT	
CONTRACT NO.		REV. N/C	
DIMENSIONS SPECIFIED DRAWING AND ALL PARTS SHOWN THEREON SHALL BE TO THE DIMENSIONS SHOWN UNLESS OTHERWISE SPECIFIED		SEE CAGE CODE B. 07M26	647.3700
SCALE: NONE		SHEET 2 OF 5	

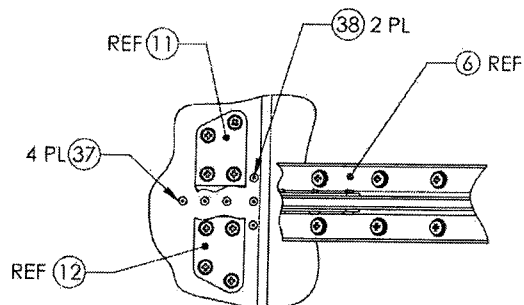
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



647.3701 & 647.3702
UPPER CUTTER ASSEMBLY
TOP VIEW



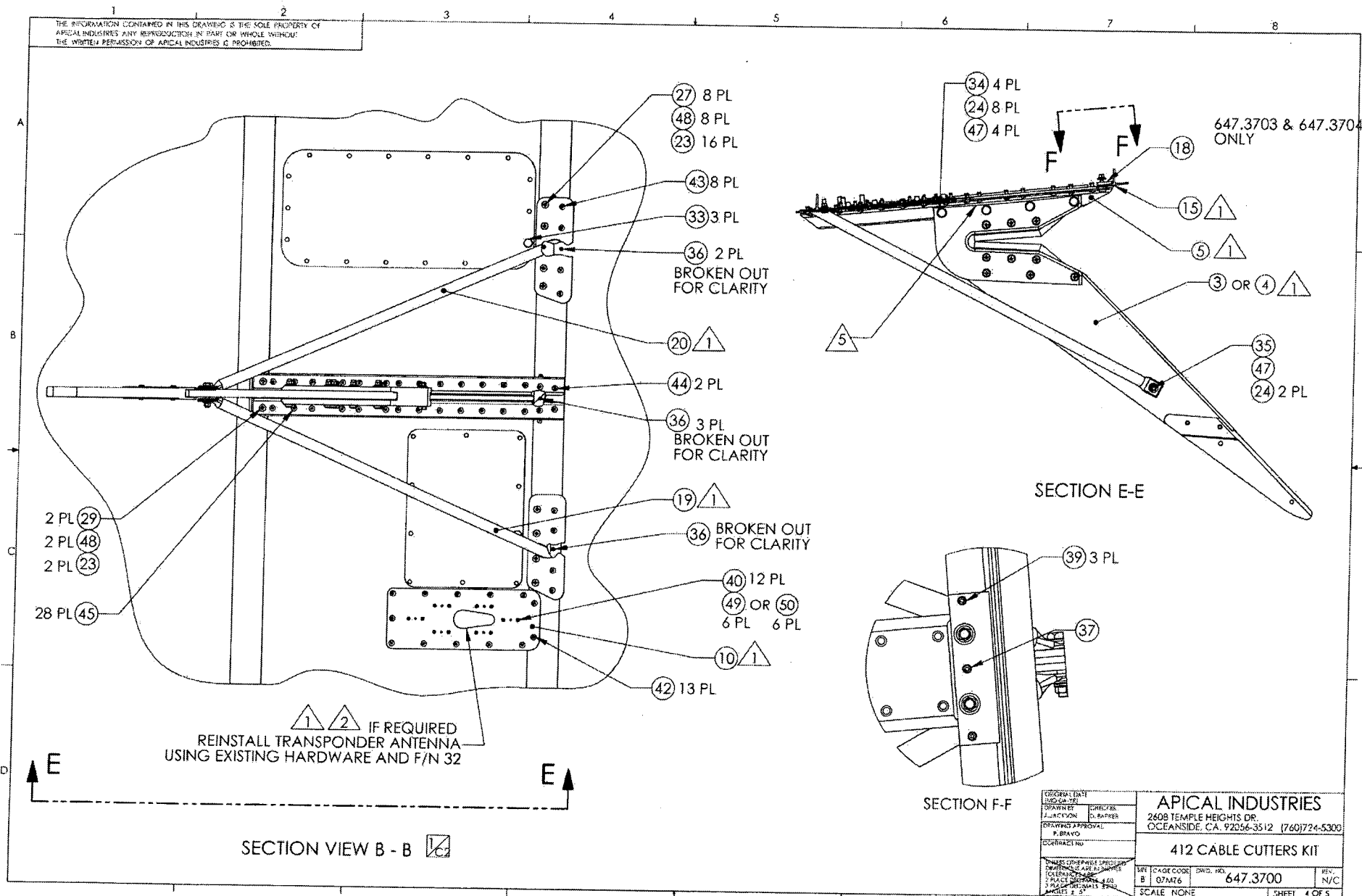
647.3703 & 647.3704
UPPER CUTTER ASSEMBLY
TOP VIEW



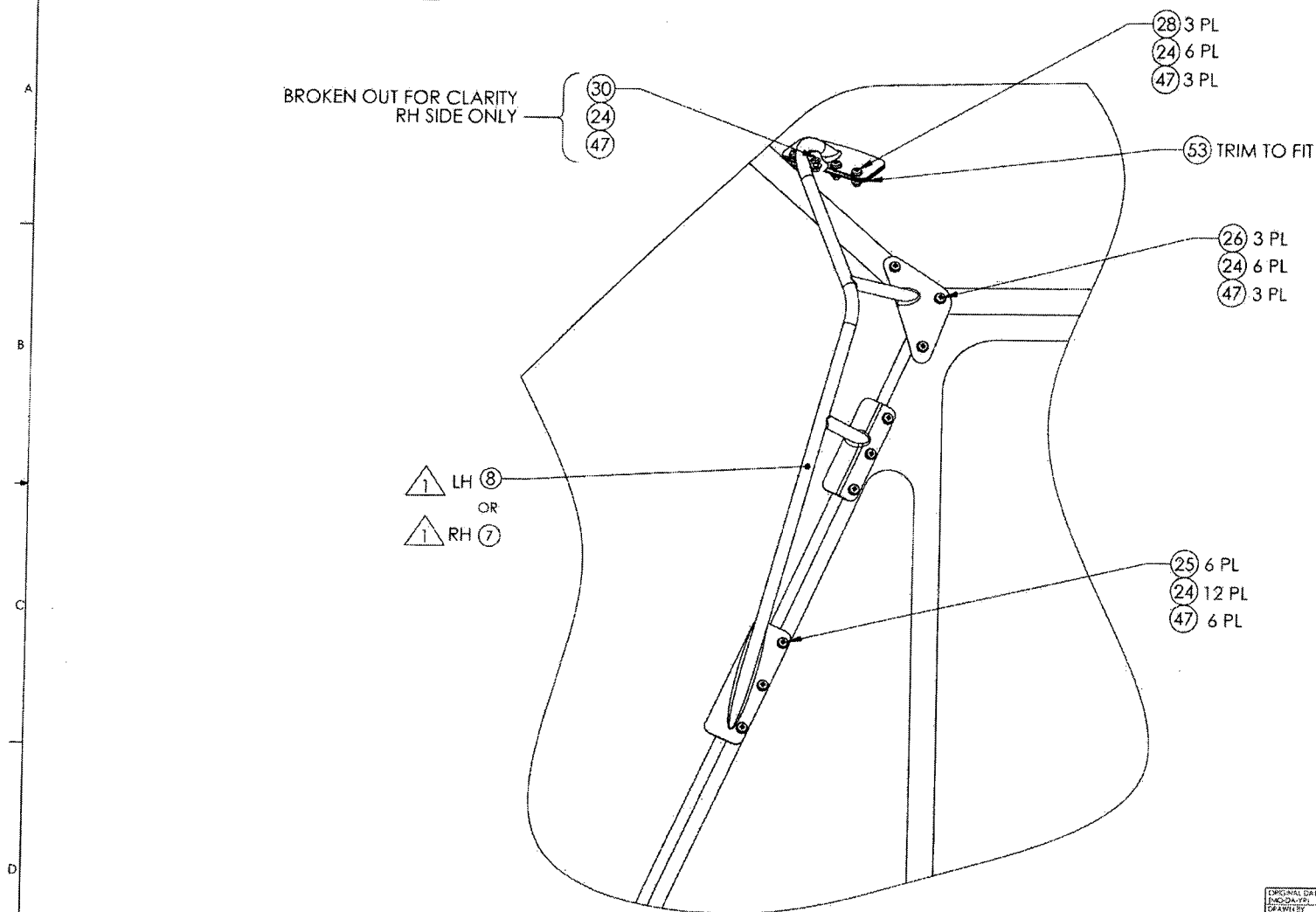
DETAIL D 
TOP VIEW
BROKEN OUT FOR CLARITY

CDR: GARY CARL (ECO-DA-VE) DRAWN BY: J. JACKSON CHECKED BY: D. BARBER DRAWING APPROVAL: P. BRAVO CDR (TRACTING)		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-6300	
THESE COMPONENTS SHIP IN TOOLS AND ARE IN THE 2 PLACE IN THE 4-22 3 PLACE IN THE 2-22 4 PLACE IN THE 2-22		412 CABLE CUTTERS KIT	
KIT CODE: B SCALE: NONE	PART CODE: 647.3700 REV: N/C	1 SHEET 3 OF 3	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



BROKEN OUT FOR CLARITY
RH SIDE ONLY

1 LH 8
OR
1 RH 7

DETAIL C 
LH SHOWN, RH OPPOSITE
2 PL

ORIGINAL DATE		APICAL INDUSTRIES	
INQUIRY		2608 TEMPLE HEIGHTS DR.	
DRAWN BY		OCEANSIDE, CA, 92056-3512 (760)724-5300	
L. H. HOSKINS		412 CABLE CUTTERS KIT	
DRAWN BY APPROVAL		REV	
D. BRAYO		N/C	
CORRECTION:		SCALE NONE	
THIS DRAWING IS THE PROPERTY OF APICAL INDUSTRIES		SHEET 5 OF 5	
2 PLACE DEPOSIT		647.3700	
3 PLACE DEPOSIT		07M16	
4 PLACE DEPOSIT		B	
5 PLACE DEPOSIT		07M16	
6 PLACE DEPOSIT		B	
7 PLACE DEPOSIT		07M16	
8 PLACE DEPOSIT		B	

REFERENCE ONLY

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

UNINCORPORATED ECN(S)

01222, 04845, 048801

NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
- 2 IF REQD. USE F/N 32 TO CONNECT CO-AXIAL CABLE.
- 3 VENDOR : ONLINECOMPONENTS.COM
- 4 AT CUSTOMERS OPTION, INSTALL F/N 56 BY MATCH DRILLING ONTO F/N 1 OR F/N 2.
- 5 APPLY F/N 55 TO FAYING SURFACES.
- 6 VENDOR : MCMaster-CARR
VENDOR P/N: 86715K27
60A DUROMETER

DETAIL C

647.3701 SHOWN

REF	REF	REF	REF	56	647.5701	GPS MOUNT KIT	
A/R	A/R	A/R	A/R	55	601.2045	RTV	LOCITE 998
A/R	A/R	A/R	A/R	54	601.1012	SEALANT	PRELITS GLASS
1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	MIL-R-3006
4	4	4	4	52	601.2957	NUTPLATE	MS2107113
4	4	4	4	51	600.0795	NUTPLATE	MS21047-3
6	6	6	6	50	601.3066	NUTPLATE	MS21047106
6	6	6	6	49	601.3065	NUTPLATE	MS21047106
18	18	18	18	48	601.2973	LOCKNUT	MS21042-05
79	79	79	79	47	601.2943	LOCKNUT	MS21042-03
4	4	4	4	46	601.2364	CHERRY RIVET	CR3212-4-8
28	28	42	42	45	601.1183	CHERRY RIVET	CR3213-4-5
16	16	19	19	44	601.1915	CHERRY RIVET	CR3213-4-4
24	24	32	32	43	601.0790	CHERRY RIVET	CR3210-4-3
31	31	13	13	42	601.1039	CHERRY RIVET	CF2213-4-2
3704	3703	3702	3701	FIND #	PART #	DESCRIPTION	MAT'L SPEC.

REV	DESCRIPTION	DATE	APPROVED
1	LAST PROGRESSIVE REVISION (REV)		NIC
2	INITIAL RELEASE	08-20-09	P. B. ALVO

16	16	16	16	41	601.2207	NUTPLATE RIVET	CCR2455-3-05
12	12	12	12	40	601.2491	NUTPLATE RIVET	CCR2455-3-04
7	7	4	4	39	601.1066	CHERRY RIVET	CR3212-4-4
17	17	17	17	38	601.1065	CHERRY RIVET	CR3212-4-3
5	5	6	6	37	601.1604	CHERRY RIVET	CR3212-4-2
6	6	6	6	36	601.3082	CHERRY RIVET	CR3212-4-1
2	2	2	2	35	601.1874	BOLT	AN3C104
8	8	8	8	34	601.2826	BOLT	AN3-11A
3	3	3	3	33	601.2823	BOLT	AN3-4A
1	1	1	1	32	601.3073	CONNECTOR	080-4440
8	8	8	8	31	601.2419	SCREW	MS2464C53
1	1	1	1	30	601.3070	SCREW	MS2464C54
2	2	2	2	29	601.2893	SCREW	MS2703P-08-1
14	14	14	14	28	601.3069	SCREW	MS2703P-1-09
16	16	16	16	27	601.2263	SCREW	MS2703P-0806
42	42	42	42	26	601.1365	SCREW	MS2703P-1-10
12	12	12	12	25	601.2198	SCREW	MS2703P-1-07
157	157	157	157	24	601.1607	WASHER	MS21149P030P
34	34	34	34	23	601.2764	WASHER	MS21149P030P
1	1	1	1	22	647.4313	RH UPPER STRUT	
1	1	1	1	21	647.4312	LH UPPER STRUT	
1	1	1	1	20	647.4310	LH LOWER STRUT	
1	1	1	1	19	647.4311	RH LOWER STRUT	
1	1	1	1	18	647.4212	PLATE	
1	1	1	1	17	647.4211	BRACKET RH	
1	1	1	1	16	647.4210	BRACKET LH	
1	1	1	1	15	647.4116	SHIM	
2	2	2	2	14	647.4115	SHIM	
2	2	2	2	13	647.4114	SHIM	
1	1	1	1	12	647.4113	CLIP	
1	1	1	1	11	647.4112	CLIP	
1	1	1	1	10	647.4111	DOUBLER	
1	1	1	1	9	647.4110	DOUBLER	
1	1	1	1	8	647.4011	WIPER DEFLECTOR LH	
1	1	1	1	7	647.4010	WIPER DEFLECTOR RH	
1	1	1	1	6	647.3915	DEFLECTOR	
1	1	1	1	5	647.4410	RAIL	
1	1	1	1	4	647.3804	LOWER CUTTER ASSY HIGH	
1	1	1	1	3	647.3803	LOWER CUTTER ASSY LOW	
1	1	1	1	2	647.3802	212 UPPER CUTTER ASSY	
1	1	1	1	1	647.3801	412 UPPER CUTTER ASSY	
3704	3703	3702	3701	FIND #	PART #	DESCRIPTION	MAT'L SPEC.

QTY

NEXT ASSY (S)

PARTS LIST

DESIGNER: DATE: 08-20-09
DRAWN BY: J. JACKSON
CHECKED BY: D. BARNEY
APPROVED BY: P. B. ALVO
REVISION: 08-20-09

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

412 CABLE CUTTERS KIT
REV: 07M26 DWS: 647.3700
SCALE: NONE SHEET: 1 OF 5